To: Principal Smith, Mr. Chapman - Science Department Chair, and Ms. Welsh- English Department Chair

From: Althea Roy

RE: English and Chemistry Department Partnership for a New Scientific Writing Assignment

The Chemistry Department curriculum currently follows the Georgia Performance Standards. As of right now, the main focus is on Content standards, due to the fact that course content is what the SLO assesses. However, there are Habit of Mind Standards which require students to learn how to communicate scientific investigations. Students must learn how to analyze data and support scientific arguments through oral presentations and written Laboratory reports (Georgia Department of Education, 2006). The ability for students to be able to write scientifically and express ideas in a written format is a life skill often overlooked in science course work. An ability to communicate is needed to be successful in future academic endeavors and careers. The English Department also follows the Georgia performance standards. According to the Georgia Department of Education, the English department is to prepare students to “communicate in multiple modes of discourse demonstrating a strong command of the rules of Standard English” (Georgia Department of Education, 2015, para 1). In addition, students graduating from high school “will have built strong and varied vocabularies across multiple content areas, including technical subjects” (Georgia Department of Education, 2015, para. 1).

I propose a partnership between the chemistry department and the English department for the second 9 weeks of a semester to teach and assist students in writing a full laboratory report. During the 9 week partnership, both classes would continue to teach new material and course work, while also dedicating time to this long term assignment. Students would perform the lab and collect the data in chemistry class near the beginning of the second 9 weeks. Chemistry teachers would instruct students on how to write a proper lab report and would provide grading rubrics regarding the content needed to be successful on the assignment. The English Department would provide grading rubrics for proper writing mechanics and MLA citations.

Students today are showing a lack of motivation and decreased involvement in education. What possibly began as a fear of failure, has led to learned helplessness and a general devaluation of the education being received. The desired results of the assignment are to increase self-esteem, create accountability, and increase career and college readiness. Students will be asked to submit rough drafts for different parts of the lab report (abstract, introduction, procedure, results, discussion, and conclusion) each week in chemistry class. One day of each week students will go to the computer lab and be given time to work in class; these days will be divided between the English and Chemistry department. For each draft submitted, the student will receive positive feedback with a temporary grade from both the Chemistry and the English teacher. The idea being that students will see that they have good ideas and have a spring board from which to jump. Students will continue to edit and improve the sections of the lab report throughout the nine weeks. The final report will be due on the last full week of classes. The assignment will increase accountability because there will be continual deadlines and, at the end of the 9 weeks, the lab report would be jointly graded by the two departments and would count as a grade for both classes. Lastly, it will increase career and college readiness because it will help students with time management, scientific written communication skills, research, and learning the editing process.

This assignment is feasible and realistic. There would be no additional costs to the school. The assignment meets standards for both departments. Due to the nature of the assignment, it would not matter which English grade level the student was enrolled because the assignment meets standards found in grades 9-12. The downside to the assignment are decreased time for other standards, more teacher time spent in department meetings collaborating (which is both positive and negative), and to be enrolled in chemistry the student must also be taking an English course. If scheduling allowed, paring each chemistry teacher with one English teacher would make collaboration easier and less time consuming. In future years, if this assignment were to work, students could propose their own investigations and could be submitted to a science fair to increase accountability.

References:

Georgia Department of Education. (2006). *Chemistry Curriculum*. Retrieved from <https://www.georgiastandards.org/standards/Georgia%20Performance%20Standards/Chemistryrevised2006.pdf>

Georgia Department of Education. (2015). *English Language Arts Georgia Standards of Excellence (GSE) 9-12*. Retrieved June 01, 2016, from https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-9-12.aspx